

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-39 (cancelled).

40. (currently amended) A composition comprising a non-covalent association complex of:

a positively charged backbone covalently attached to a plurality of amino acid sequences, wherein said amino acid sequences are selected from the group consisting of (gly)_p-RGRDDRRQRRR-(gly)_q (SEQ ID NO:19), and (gly)_p-YGRKKRRQRRR-(gly)_q (SEQ ID NO: 20) wherein p and q are each independently an integer of from 0 to 20;

a negatively charged backbone having a plurality of attached targeting agents; and

a negatively charged backbone having a plurality of attached biological agents, wherein each of said biological agents is a therapeutic agent or a cosmeceutical agent and not a nucleic acid; ~~and~~

wherein said non-covalent association complex carries a net positive charge.

41. (Previously Presented) The composition according to claim 40, wherein said therapeutic agent is selected from the group consisting of VEGF, botulinum toxin, a blocker of VEGF, and insulin.
42. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an analgesic.

43. (Withdrawn) The composition according to claim 42, wherein said analgesic is selected from the group consisting of lidocaine, novacaine, bupivacaine, procaine, tetracaine, benzocaine, cocaine, mepivacaine, etidocaine, proparacaine, ropivacaine, and prilocaine.
44. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anti-asthmatic agent.
45. (Withdrawn) The composition according to claim 44, wherein said anti-asthmatic agent is selected from the group consisting of azelastine, ketotifen, traxanox, corticosteroids, cromolyn, nedocromil, albuterol, bitolterol mesylate, pirbuterol, salmeterol, terbutyline, and theophylline.
46. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antibiotic.
47. (Withdrawn) The composition according to claim 46, wherein said antibiotic is selected from the group consisting of neomycin, streptomycin, chloramphenicol, norfloxacin, ciprofloxacin, trimethoprim, sulfamethyloxazole, β -lactam antibiotics, and tetracycline.
48. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antidepressant agent.

49. (Withdrawn) The composition according to claim 48, wherein said antidepressant agent is selected from the group consisting of nefopam, oxypertine, imipramine, and trazadone.
50. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anti-diabetic agent.
51. (Withdrawn) The composition according to claim 50, wherein said anti-diabetic agent is selected from the group consisting of biguanidines and sulfonylureas.
52. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antiemetic or antipsychotic.
53. (Withdrawn) The composition according to claim 52, wherein said antiemetic or antipsychotic is selected from the group consisting of chlorpromazine, fluphenazine, perphenazine, prochlorperazine, promethazine, thiethylperazine, triflupromazine, haloperidol, scopolamine, diphenidol, and trimethobenzamide.
54. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a neuromuscular agent.
55. (Withdrawn) The composition according to claim 54, wherein said neuromuscular agent is selected from the group consisting of atracurium mivacurium, rocuronium, succinylcholine, doxacurium, and tubocurarine.

56. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antifungal agent.
57. (Withdrawn) The composition according to claim 56, wherein said antifungal agent is selected from the group consisting of amphotericin B, nystatin, candicidin, itraconazole, ketoconazole, miconazole, clotrimazole, fluconazole, ciclopirox, econazole, naftifine, terbinafine, and griseofulvin.
58. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antihypertensive agent.
59. (Withdrawn) The composition according to claim 58, wherein said antihypertensive agent is selected from the group consisting of propranolol, propafenone, oxyproprenolol, nifedipine, and reserpine.
60. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anti-impotence agent.
61. (Withdrawn) The composition according to claim 60, wherein said anti-impotence agent is a nitric oxide donor.

62. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a steroidal anti-inflammatory agent.
63. (Withdrawn) The composition according to claim 62, wherein said steroidal anti-inflammatory agent is selected from the group consisting of cortisone, hydrocortisone, dexamethasone, prednisolone, prednisone, and fluazacort.
64. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a non-steroidal anti-inflammatory agent.
65. (Withdrawn) The composition according to claim 64, wherein said non-steroidal anti-inflammatory agent is selected from the group consisting of indomethacin, ibuprofen, ramifenizone, and prxicam.
66. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an antineoplastic agent.
67. (Withdrawn) The composition according to claim 66, wherein said antineoplastic agent is selected from the group consisting of adriamycin, cyclophosphamide, actinomycin, bleomycin, duanorubicin, doxorubicin, epirubicin, mitomycin, rapamycin, methotrexate, fluorouracil, carboplatin, carmustine (BCNU), cisplatin, etoposide, interferons, phenesterine, taxol and analogs and derivatives thereof, camptothecin and derivatives thereof, vinblastine, and vincristine.

68. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anti-viral agent.
69. (Withdrawn) The composition according to claim 68, wherein said anti-viral agent is selected from the group consisting of amantadine, methisazone, idoxuridine, cytarabine, acyclovir, famciclovir, ganciclovir, foscarnet, sorivudine, trifluridine, valacyclovir, cidofovir, didanosine, stavudine, zalcitabine, zidovudine, ribavirin, and rimantadine.
70. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anxiolytic agent.
71. (Withdrawn) The composition according to claim 70, wherein said anxiolytic agent is selected from the group consisting of dantrolene and diazepam.
72. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a COX-2 inhibitor.
73. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a contraception agent.
74. (Withdrawn) The composition according to claim 73, wherein said contraception agent is progestogen.

75. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an anti-thrombotic agent.
76. (Withdrawn) The composition according to claim 75, wherein said anti-thrombotic agent is selected from the group consisting of a GPIIb/IIIa inhibitor, a tissue plasminogen activator, streptokinase, urokinase, and heparin.
77. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a prothrombotic agent.
78. (Withdrawn) The composition according to claim 77, wherein said prothrombotic agent is selected from the group consisting of thrombin, factor V, factor VII, and factor VIII.
79. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is a hormone.
80. (Withdrawn) The composition according to claim 79, wherein said hormone is selected from the group consisting of prolactin, growth hormone, and epidermal growth factor.
81. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an immunosuppressive agent.

82. (Withdrawn) The composition according to claim 81, wherein said immunosuppressive agent is selected from the group consisting of cyclosporine, azathioprine, mizorobine, FK506, and prednisone.
83. (Withdrawn) The composition according to claim 40, wherein said therapeutic agent is an angiogenic agent.
84. (Withdrawn) The composition according to according to claim 40, wherein said therapeutic agent is a vitamin.
85. (Withdrawn) The composition according to claim 84, wherein said vitamin is selected from the group consisting of vitamin A, vitamin D, vitamin E, and vitamin K.
86. (cancelled)
87. (Previously Presented) The composition according to claim 40, wherein said amino acid sequences have the formula $(\text{gly})_p\text{-RGRDDRRQRRR-(gly)}_q$ (SEQ ID NO:19), wherein p and q are each independently an integer from 0 to 20, and wherein each of said amino acid sequences is attached to said positively charged backbone via the C-terminus or the N-terminus of said each amino acid sequence.
88. (Previously Presented) The composition in accordance with claim 87, wherein the subscripts p and q are each independently integers of from 0 to 8.

89. (Previously Presented) The composition in accordance with claim 88, wherein the subscripts p and q are each independently integers of from 2 to 5.
90. (Previously Presented) The composition according to claim 87, wherein therapeutic agent is botulinum toxin.

Claims 91-138 (cancelled)

139. (Previously Presented) The composition according to claim 40, wherein the biological agent is a therapeutic agent.
140. (Previously Presented) The composition according to claim 139, wherein the therapeutic agent is botulinum toxin.